

REMARKS

Applicants respectfully request reconsideration. Claims 1-34 were previously pending in this application. By this amendment, Applicants amend claims 10, 14, 17 and 31 for clarification and adds claims 35-39. As a result, claims 10, 11, 14, 16-22 and 33-39 are pending for examination with claims 1, 9, 14, 17, 23, 30 and 35 being independent claims. No new matter has been added.

Applicants note with appreciation the allowance of claims 1-4, 6-9, 12, 13 and 23-32, and the allowance of claims 21, 22, 33 and 34 if rewritten in independent form to include all the limitations of their respective independent claims.

1. Claims 10, 11, 14 and 17 as Amended Satisfy 35 U.S.C. §112

Claims 10 and 11 stand rejected under §112, second paragraph, as purportedly being indefinite because claim 10 depends from claims 1 and 9. In response, Applicants have amended claim 10 to remove the reference to claim 1 and to add language that clarifies the subject matter for which protection is being sought. Applicants have made a similar clarifying amendment to claim 31.

In view of the forgoing, Applicants respectfully submit that claims 10 and 11 satisfy §112, second paragraph, and request that the rejections of these claims under this section be withdrawn.

Claims 14 and 17 stand rejected under §112 because the phrase “such that” purportedly renders the claims indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. Although Applicants respectfully disagree, claims 14 and 17 have been amended as shown above to remove the phrase “such that” and to add language that clarifies the subject matter for which protection is being sought.

In view of the foregoing, Applicants respectfully submit that claims 14 and 17 as amended satisfy the requirements of 35 U.S.C. §112, and request that the rejections of these claims under this section be withdrawn.

2. Claims 14, 16, 33 and 34 Patentably Distinguish Over DeMichele in View of Burdick and Schneider

Claim 14 stands rejected under §103(a) as purportedly being obvious over DeMichele and further in view of Burdick and Schneider. Applicants respectfully traverse this rejection.

For reasons clearly set forth in Applicants' previous response submitted October 12, 2004, the combination of DeMichele and Burdick is improper. Accordingly, for at least these same reasons, the combination of DeMichele, Burdick and Schneider is improper.

Even if the combination of DeMichele, Burdick and Schneider were proper (which it is not), claim 14 patentably distinguishes over such combination for at least the following reasons. The discussions of DeMichele and Burdick in Applicants' previous responses are hereby incorporated by reference. Schneider is directed to communicating data between a transponder 101 and an inductively-coupled base station (Col. 1, lines 7-9; Fig. 1). Transponder 101 has an antenna 201, which can be implemented as a coil comprising one or more turns of conductive wire. This wire may be sized and shaped to receive sufficient energy from the controller field at a specified distance from a controller 102 (Col. 3, lines 50-52, 56-59; Fig. 2).

Claim 14 has been amended for clarification according to the specification, for example, on page 8, lines 9-12. Claim 14, as amended, recites:

A transponder comprising:
an oscillating circuit adapted to be excited by an external electromagnetic field when the transponder enters the electromagnetic field, the oscillating circuit including an inductance, and wherein a stray capacitance of the inductance acts as a capacitive element for the oscillating circuit,

wherein components of the oscillating circuit are sized based on a particular distance, which serves as an operating point between the transponder and the terminal, to produce an operating condition in which a coupling coefficient between the transponder and a read/write terminal that generates the electromagnetic field rapidly decreases when a distance separating the transponder from the read/write terminal becomes greater than the particular distance.

The Office Action (page 4, second and third full paragraphs; page 6, second and third full paragraphs) treats the phrase “sized based on a particular distance” as if it were independent from the remainder of claim 14. However, this phrase, including the term “particular distance”, must be considered in the context of claim 14. Read in context, the “particular distance” is not just any distance, but a distance “which serves as an operating point between the transponder and the terminal, to produce an operating condition in which a coupling coefficient between the transponder and a read/write terminal that generates the electromagnetic field rapidly decreases when a distance separating the transponder from the read/write terminal becomes greater than the particular distance.” Schneider does not teach or suggest sizing components of a transponder based on such a distance. Rather, Schneider describes sizing an antenna coil of a transponder to receive sufficient energy from an electromagnetic field at a specified distance from a controller. The same can arguably be said for any antenna. However, sizing antennas to receive sufficient energy at a specified distance from a source of an electromagnetic field is not what is recited in claim 14.

Further, as conceded in the Office Action, DeMichele and Burdick do not disclose components of an oscillating circuit sized based a particular distance (page 4, second full paragraph). Accordingly, even if DeMichele, Burdick and Schneider are combined, no resulting combination would teach or suggest the limitation of claim 14 highlighted above.

In view of the foregoing, claim 14 patentably distinguishes over DeMichele, Burdick and Schneider, individually or in combination. Accordingly, Applicants respectfully request that the rejection of claim 14 under §103(a) be withdrawn. Claims 16, 33 and 34 each depend from claim 14 and are patentable for at least the same reasons. Accordingly, Applicants respectfully request that the rejection of claim 16 be withdrawn.

3. **Claims 17-21 patentably distinguish over AAPA, Burdick and Schneider**

Claims 17 stands rejected under 35 U.S.C. §103(a) as purportedly being obvious over Applicants' admitted prior art (AAPA) in view of Burdick and further in view of Schneider. Applicants respectfully traverse this rejection.

For reasons set forth in Applicants' previous responses, the combination of AAPA and Burdick is improper. For at least these reasons, the combination of AAPA, Burdick and Schneider is improper.

Even if the combination of AAPA, Burdick and Schneider were proper (which it is not), such combination would not teach or suggest all of the limitations recited in claim 17.

Claim 17 as amended recites:

A system for data transfer comprising:
a terminal including a series oscillating circuit having a first inductive element and a first capacitive element; and
a transponder including a parallel oscillating circuit having a second inductive element and a second capacitive element;
wherein the first and second inductive elements and first and second capacitive elements are sized based on a particular distance, which serves as an operating point between the transponder and the terminal, to produce an operating condition in which a coupling coefficient between the series oscillating circuit and the parallel oscillating circuit decreases rapidly when a distance between the terminal and the transponder is greater than the particular distance.

As conceded and the Office Action, AAPA and Burdick do not disclose the first and second inductive elements in the first and second capacitive elements are sized based on a particular distance. Further, as should be clear from the discussion of Schneider set forth in Section 2 above, Schneider does not teach or suggest the limitation of claim 17 highlighted above. Rather, Schneider merely describes sizing an antenna coil of a transponder to receive sufficient energy from an electromagnetic field at a specified distance from a controller. Further, Schneider is silent regarding sizing inductive and capacitive elements of a terminal at all, but rather, deals exclusively with components of a transponder.

In view of the foregoing, claim 17 patentably distinguishes over AAPA, Burdick and Schneider, individually or in combination. Accordingly, Applicants respectfully request that the rejection of claim 17 under §103(a) be withdrawn. Claims 18-21 each depend from claim 17 and are patentable for the same reasons. Accordingly, Applicants respectfully request that the rejections of claims 18-20 be withdrawn.

4. **Newly Added Claims 35-39 Patentably Distinguish Over the Art of Record**

As should be clear from the discussion of the art of record set forth above, including the discussions of AAPA, DeMichele, Burdick and Schneider, the art of record does not teach or suggest:

A terminal for generating an electromagnetic field adapted to cooperate with at least one transponder when the at least one transponder is within the electromagnetic field, the terminal including an oscillating circuit for generating the electromagnetic field, and the at least one transponder including an oscillating circuit,

wherein a particular distance of separation between an oscillating circuit of the at least one transponder and the oscillating circuit of the terminal serves as an operating point between the terminal and the transponder; and

wherein one or more components of the terminal are sized to produce a coupling between the terminal and the at least one transponder that rapidly decreases when a distance between the oscillating circuit of the at least one transponder and the oscillating circuit of the terminal exceeds the particular distance.

Claims 36-39 each depend from claim 35 and are patentable over the art of record for at least the same reasons.

CONCLUSION

A Notice of Allowance is respectfully requested. The Examiner is requested to call the undersigned at the telephone number listed below if this communication does not place the case in condition for allowance.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,
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